Title: Root symbiotic fungi: key players in the forest ecosystems of the Big Thicket.

Introduction: Mycorrhizas, a symbiosis between fungi and plant roots, provide the physiological link between the majority of terrestrial plant species and their soil nutrients (Mosse 1973). One particular group of these root symbionts, the ectomycorrhizal (EcM) fungi, are essential for the good health and survival of the dominant trees that compose the various forest ecosystems in the Big Thicket (BT). Pines, oaks, beeches, etc... are associated with a very diverse assemblage of sometimes highly specific symbiotic fungi that allow these trees to manage stress, to survive drought and to thrive under sometimes very poor soil conditions. DNA barcoding and sequencing has enabled substantial progress to be made in fungal systematics, evolution, and ecology (Horton and Bruns 2001, Peay et al. 2008). Nonetheless, the pace of molecular data acquisition in fungal research has far exceeded our abilities to keep up with biodiversity inventories and formal descriptions of sporocarps (Hibbett et al. 2009). Unless major efforts are put forth to combine fungal taxonomy with molecular data, progress in understanding the scope and significance of this extraordinary fungal diversity will be limited. In the southern United States, the identification of these fungi suffers from a severe taxonomic impediment: there are no local taxonomic experts available for many of the dominant groups of these ectomycorrhizal fungi (see Youtube: http://www.youtube.com/watch?v=-wPVppwJqR0&list=ECOyuQaVrp4qrweAIKZRhJjlPFj2gbYJgY&index= 14&feature=plpp_video). Nearly all of the taxonomic studies on these fungi date back to the first half of the 20th century.

This project will focus on some of the dominant groups of these EcM fungal symbionts: i.e. Russulales and Cantharellales. The PI is the world authority on the taxonomy of these groups and, through regular field work during the past 10 years, has accumulated a substantial experience with the North American taxa, in particular in the southern states, including the Big Thicket (see publication list). In accordance with the recommendations of the first FESIN North American Mycoflora Workshop (New Haven CT, July 2012), in which the PI participated as an invited expert, the objectives of this project are the following:

- to compare fungal root symbionts associated with the different types of forest communities in the BT: longleaf pine uplands, pine savannah wetlands, Beech-Magnolia-Loblolly pine, Upper and Lower Floodplains, Arid Sandylands, etc...
- to collect and document the fungal fruit bodies before drying them for futher conservation in local herbaria (with duplicates at the Natural History Museum of Paris)
- to interact in the field with citizen scientists in view of building local taxonomic expertise and capacity in these fungal groups
- to sample fruit body tissue of collected fungi for future molecular purposes (barcoding & phylogeny)
- to sample also the root symbiotic organs (the ectomycorrhiza) in view of establishing unequivocally the associated host for collected specimens
- to provide online access to data on collected species through websites dedicated to specific fungal groups: *Russula* and *Lactarius* (http://www.mtsn.tn.it/russulales-news/welcome.asp) and *Cantharellus* and *Craterellus* (http://www.mtsn.tn.it/cantharellus-news/welcome.asp) or discussion and exchange forums on American fungi (http://mushroomobserver.org/).

Methodology and time line:

project start date: Mid July 2014 project end date: Mid July 2015

<u>field mission</u>: the project starts with a **collecting trip in the Big Thicket between mid-July 2014 until August 9, 2014.**

The major units to be visited include the Lance Rosier, Big Sandy, Beech Creek, Jack Gore Baygall, Canyonlands, Beaumont and Turkey Creek Units.

Our working base would include the Field Research Station in Saratoga where we could use laboratory facilities for part of the lab work, and for the remainder of our visit we will be hosted by David Lewis and family.

Methodology:

- we will be collecting in the different types of forest communities in the BT, depending on fruiting conditions of the fungi: longleaf pine uplands, pine savannah wetlands, Beech-Magnolia-Loblolly pine, Upper and Lower Floodplains, Arid Sandylands, etc... GPS coordinates will allow to precisely locate collecting sites for all collections.
- we will document (notes and photographs) the fresh fungal fruit bodies before drying them for further conservation in local US herbaria (for ex. Field Museum in Chicago which has already most of the fungal collections made in Texas, with duplicates at the Natural History Museum of Paris)
- we will interact in the field with local citizen scientists (D.Lewis, J.Justice) in view of building local taxonomic expertise and capacity in these fungal groups
- we will sample fruit body tissue of collected fungi for future molecular purposes (barcoding & phylogeny) using 500µl CTAB buffer in 1.5 ml eppendorf tubes
- Using similar 500µl CTAB buffer in 1.5 ml eppendorf tubes, we will also sample the root symbiotic organs (the ectomycorrhiza) that can be found immediately beneath the fungal fruiting bodies in view of establishing unequivocally the associated host for collected specimens using molecular identification through blasting sequences for both the host and the fungus.

Upon completion of the field trip, collections will be studied microscopically in view of a more precise identification. In this context, it is important to note that the PI and Dr. S. Adamcik (Botanical Museum Bratislava, Slovakia) are undertaking a detailed morphological revision of all existing type specimens of American Russulas (see publication list). At the same time, we have been collecting tissue from all Murrill's species at the Gainesville herbarium (FLAS) for extraction and sequencing of some of their DNA. Both these aspects will contribute considerably to the ease of correct identification of the collected specimens.

Anticipated number of specimens and taxa to be collected: depending on the weather conditions of the preceding weeks (allowing for fruiting of the fungi), the number of collections may vary from ca 100 to several hundreds of specimens.

The expected diversity of the targeted genera in the Big Thicket is equally very high. Recently, Buyck et al. (2010, 2011) described 5 new species in the genus Cantharellus from

Texas (including from the Big Thicket). This represents about 1/3 of the known diversity for this genus in North America, yet, our still ongoing molecular analysis of some 20 specimens of chanterelles collected in 2010-2011 by J.Justice, revealed a total of 11 different species of Cantharellus, including 6 still unpublished taxa, indicating a much higher diversity than expected for these mushrooms. In the case of the very diverse genus Russula, the expected diversity in the southern states amounts to several hundreds of species, most of these representing new species to Science. In collaboration with D. Lewis, several new taxa in the genus Russula from Texas are in the process of being described.

Data submission, and reporting:

A list of collected specimens with preliminary identifications and collecting locations with GPS coordinates can be submitted upon completion of the field mission (end of August 2014). By July 2015 (end of the project), an updated version of this list integrating more precise identifications resulting from the microscopic analysis of fungal specimens will be transmitted.

For already known taxa, we will provide online access to data on collected species (e.g. by posting pictures of identified collections) through our websites dedicated to *Russula* and *Lactarius* (http://www.mtsn.tn.it/russulales-news/welcome.asp) and *Cantharellus* and *Craterellus* (http://www.mtsn.tn.it/cantharellus-news/welcome.asp). We will discuss findings on exchange forums on American fungi, such as http://mushroomobserver.org/ where some data on Big Thicket fungi is already posted.

Publication of the findings of the inventory.

Our collections from the Big Thicket will undoubtedly result in the discovery of quite a number of undescribed species for the targeted genera. These findings will result in several publications in peer reviewed journals in the coming years.

<u>Budget</u>: The costs associated with keeping of herbarium specimens and later molecular work will be contributed by other projects of both European scientists.

The requested funding only applies to field work.

Air fare Paris-Houston: 1450 euro/person x 2 = 3830 US dollars Taxi airport (paris AR): 130 euro = 170 US dollars

Participation in living expenses, local transportation (3 weeks):

20 x 50 US/day x 2 pers = 2000 US dollars

Total: 6000 US dollars

Contacts:

Bart BUYCK (PI) – morphology and description

Address: Département Systématique et évolution, UMR7205,

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Tel. int-33-1 40793186 (work), int-33-671645061 (cell) Email: notoleuca@yahoo.com (preferred), buyck@mnhn.fr

Valerie HOFSTETTER – barcoding and phylogeny Address: Department of Plant Protection,

Agroscope Changins-Wädenswil Research Station ACW,

Rte De Duiller,

1260 Nyon, Switzerland

Email: valnatel@yahoo.com (preferred), Valerie.hofstetter@acw.admin.ch

Tel: int-41- 22 363 43 53 (work), int-41-77 465 81 87 (cell)

Associated citizen scientists: David Lewis (TX), Jay Justice (AR)CV Bart BUYCK

1. PERSONAL DATA

- * SURNAME: BUYCK
- * FIRST NAMES : Bart Albert Kamiel
- * ADDRESS: Plein 65, B 9970 Kaprijke, BELGIUM
- * PROFESSIONAL ADDRESS: **Dépt. Systématique et Evolution,** MUSEUM NATIONAL D'HISTOIRE NATURELLE, UMR 7205 Case postale 39, 57 rue Cuvier, 75231 PARIS Cedex 05
- * PLACE AND DATE OF BIRTH: Sleidinge, Belgium, June 18, 1959
- * CIVIL STATE: married, April 9, 1988, divorced 2007; father of 2 sons (1991, 1993)
- * NATIONALITY : Belgian
- * MILITARY SERVICE: Medical service, March 3, 1985 January 3, 1986
- * LINGUISTIC KNOWLEDGE: **Dutch**: actif and passif: mother tongue, **French**: actif and passif: excellent, **English**: actif and passif: excellent, **German**: actif: good notions; passif: very good, **Latin**: passif: good, **Italian**, **Spanish**: good notions

2. STUDIES

- * present diploma: Doctor in Sciences (Ph.D), botany-mycology
- * previous studies:
- Secondary school: 1972-1978: Latin-Greek, St-Vincentiuscollege, Eeklo (finished with 85 %)
- Artistic formation : diploma of 2 preparatory years for the Academy of Arts, Eeklo
- High school : State University of Ghent :
 - * 1978-1981 licenciate in Science, botany

endwork: "Revision of the genus Diderma (Myxomycetes) in Belgium" great distinction supplementary diplomas: pedology, marine hydrobiology

- * 1982 aggregated for secondary school, with distinction
- * 1984-1989 doctor in Science, botany, with highest distinction

thesis: "Revision of the genus Russula in Central Africa" (in French), rewarded with the prestiguous Augustin-Pyramus de Candolle Award 1990 (Geneva, Switzerland) additionnal thesis: "The importance of ectomycorrhizal fungi in tropical areas"

* special courses:

Aug. 1-16, 1982 : course in informatics "Fortran IV", State University of Ghent Aug. 16-27, 1982 : "Microscopy of Basidiomycetes", National Botanic Garden of Belgium Sept. 3-16, 1983 : "specimen-preparation for T. E. M.", Univ. Claude-Bernard, Lyon, France

3. CAREER

Present position

Nov. 2004 – present: Associate Professor at the National History Museum Paris, HDR qualified (means I can apply for full Professorship in France)

Previous positions

Oct. 1, 1981 - Sept. 31, 1982 : voluntary scientific collaborator at the 'Botanical Laboratory ', Ghent University, Belgium, Dir. Prof. Dr. P. Van der Veken

Oct.1, 1982 - Sept. 30, 1990: full-time assistant in the same laboratory

June 1, 1991 - Sept. 30, 1991 : part-time scientific collaborator, 'Lab. of systematic and applied Mycology', Univ. of Louvain-la-Neuve, Belgium (MUCL), Dir. Prof. Dr. Ir. G. L. Hennebert

Oct. 1, 1991 - Oct. 31, 1991 : full-time scientific collaborator at the same laboratory

Nov. 17, 1991 - Dec. 18, 1994 : full-time Prof. of Botany, Univ. of Bujumbura, Burundi (Central Africa) for the Belgian Cooperation

Dec. 19, 1994 - Feb. 19 1996 : full-time Prof. , "Vakgroep voor Morfologie, Systematiek en Ecologie", Ghent University, Belgium

Dec. 01, 1996 – present : full-time Associate Professor (Maître de Conférences) ,National Museum of Natural History, Laboratory of Cryptogams, Paris

4. AWARDS

- Award "Prix Marchal", given by the "Royal Botanical Society of Belgium' for my mycological papers between 1984-1989, received on Feb. 12, 1990

- Prestigious award "Prix Augustin-Pyramus de Candolle" from the "Société de Physique et d'Histoire Naturelle de Genève" (Switzerland) for the best unpublished study in plant taxonomy (my Ph.D. dissertation). Received on Oct. 4, 1990 (attributed only for the 15 ième time since its instauration in 1850)

5. OTHER RESPONSIBILITIES

Editor in chief

- scientific monograph series « Faunes et flores tropicales », published by Institute for Research and Development and MNHN (2000-2005)
- Cryptogamie, Mycologie (2011- present)

Co-editor

- Cryptogamie-Mycologie (ADAC-MNHN, Paris, 2000-2009)
- Fungal Diversity (2010 present)

Curator of the national mycological herbarium (PC)

Scientific director of the yearly 'Salon du Champignon' at the Muséum National d'Histoire naturelle (35000 visitors/week)

Web-site editor "Russulales News" (http://www.mtsn.tn.it/russulales-news/welcome.asp, 1996-present), Cantharellus News (http://www.mtsn.tn.it/cantharellus-news/welcome.asp, 2011-present)

Acutal vice President (twice ex-president) of the French Mycological Society

Member of the scientific committee of the yearly International mycology meeting at Bellême

Member of several foreign mycological societies

Life member of the Mycological Society of America

6. RESEARCH

In short:

In terms of diversity, Fungi are the most important group of living organisms after the insects: less than 5 % of an estimated 2 million existing species has been named! Description has thus merely started and the classification of the fungi is still very incomplete and not comparable to the more stable classifications obtained now in botany and zoology. The inventory of the existing diversity is still contributing enormously to a better understanding of the classification and relationships among species.

Although I have accumulated quite some experience in various groups of fungi (having published on myxomycetes, nematophagous fungi, molds, ascomycetes and basidiomycetes...), I have gradually become the world's leading specialist on the genera Cantharellus and, in particular, Russula, a large genus of very difficult reputation with about 800 described species worldwide for an estimated total of several thousands of species worldwide. Having studied European and African Russula for over 25 years, I am since 2001 focusing on the taxonomy of Russulas of Madagascar and North America.

In recent years, I have been working on multigene phylogenetic analyses in Russulales and Cantharellales resulting in the description of two new genera in the Russulaceae (Lactifluus and Multifurca – both present in the Big Thicket) and am now preparing the publication of 5-gene phylogenies for both Russula and Cantharellus, including many North American taxa.

Taxonomic expertise:

- 1981-1987: taxonomic study of **Myxomycetes**, in particular the genus Diderma, resulting in several publications.
- 1982-1983 : study of **nematophagous fungi**, results presented at the 'National Mycological Congress, Belgium' 1986, published
- 1984-1991: taxonomic study of **European Basidiomycetes**, in particular **Russulaceae** (Basidiomycetes), and identification of 3600 macromycetes which are deposited at the Myc. Herb. of the State University of Ghent, Belgium, (GENT) or at the Herb. of the National Botanical Garden (BR).
- 1989-present: **tropical ectomycorrhizal and edible fungi** form the main subject of my research, in particular the genus **Termitomyces** and the **worldwide taxonomy and phylogeny of Russulaceae and Cantharellaceae**

Grants: 12 grants over the past 20 years (accumulating to roughly 800.000 euro)

7. SYMPOSIA AND CONGRESSES

Participant and invited speaker at more than 70 international symposia and congresses.

8. FIELD EXPERIENCE

Field work in more than 30 countries in Europe, North and Central America, Africa, Oceania and Asia.

9. TEACHING

5 PhD students, 20 Master students, many post-docs and visiting scientists. Extensive teaching at the University of Ghent (Belgium, 1982-1990), University of Bujumbura (Burundi , 1991-1994), occasional classes at Université Paris VI (Paris, 1998-1999) and Museum of Natural History (Paris, 2003-2007).

10. PUBLICATIONS

More than 150 papers in peer-reviewed, international journals, 10 books, 9 chapters, 31 reports or vulgarizing papers, more than 30 invited oral presentations and author of >300 new fungal taxa.

Publications exclusively related to American Cantharellales and Russulales are listed below:

- BUYCK, B. & C. OVREBO, 2002 New or interesting *Russula* from Panama. *Mycologia* 94(5): 888-901 EYSSARTIER, G., B. BUYCK & R. HALLING, 2003 -- Une nouvelle chanterelle du Costa Rica: *Cantharellus atrolilacinus* sp. nov. *Cryptogamie-Mycol*.24(1): 21-25.
- BUYCK, B., 2003 Notes on the central-American *Russula cremeolilacina* var. *coccolobicola* (=*R.littoralis* Pegler). *Cryptogamie-Mycol*.24(2): 117-124.
- BUYCK, B., 2003 *R.lentiginosa* spec. nov. from West Virginia, USA, a probable link between tropical and temperate *Russula*-groups. *Cryptogamie-Mycol*.24(4): 317-325.
- BUYCK, B. & R.HALLING, 2004 Two new *Quercus* associated *Russula's* from Costa Rica and their relation to some very rare North American species. *Cryptogamie-Mycol*.25(1): 3-13.
- BUYCK, B., HALLING, R. & G. MUELLER, 2004 The inventory of *Russula* in Costa Rica: discovery of two very rare North American species in montane oak forest. *Bolletino Assoc. Mycol. Bresadola* (nuova serie) 46: 57-74.
- BUYCK, B., 2005 First record of the rare, northern *Russula xantho* from near Wildacres, North Carolina. *Cryptogamie-Mycologie* 26(4): 283-291.
- BUYCK, B., MITCHELL, D. & PARRENT, J. 2006 *Russula parvovirescens sp.nov*, a common but ignored species from Eastern United States. *Mycologia* 98(4): 612-615.
- BUYCK, B., 2007 An introduction to the study of *Russula* in the eastern United States. *Pagine di Micol*. 27: 81-86
- MUELLER GM, SCHMITT JP, LEACOCK PR, BUYCK, B, CIFUENTES J, DESJARDIN DE, HALLING RE, HJORTSTAM K, ITURRIAGA T,LARSSON K-H, LODGE DJ, MAY TW, MINTER D, RAJCHEN-BERG M, REDHEAD SA, RYVARDEN L, TRAPPE JM, WATLINGR, WU QX 2007. Global diversity and distribution of macrofungi. *Biodiversity and Conservation*: 16(1): 37-48.
- BUYCK, B., HOFSTETTER, V., EBERHARDT, U., VERBEKEN, A. & KAUF, F., 2008 Walking the thin line between *Lactarius* and *Russula* (Russulaceae, Basidiomycotina): the dilemma of subsect. *Ochricompactae*. *Fungal Diversity* 28: 15-40.
- BUYCK, B., ADAMCIK, S. & LEWIS, D., 2008 Russula section Xerampelinae in Texas. Cryptogamie-Mycologie 29(1): 13-27.
- BUYCK, B. & HOFSTETTER, V., 2008 A multigene phylogeny for worldwide *Cantharellus* (MSA 2008 Abstracts). *Inoculum* 59(4): 22.
- BUYCK, B., LEWIS, D., EYSSARTIER, G. & HOFSTETTER, V., 2010 *Cantharellus quercophilus sp.nov*. from post oak woodland in Texas with notes on other yellow brown small chanterelles in the southern USA. *Cryptogamie-Mycologie* 31(1): 17-33.
- ADAMCIK, S. & BUYCK, B., 2010 Reinstatement of *Russula levyana* as a good and distinct species of *Russula* section *Xerampelinae* in America. *Cryptogamie-Mycologie*: 31(2): 119-135.
- ADAMCIK, S., MITCHELL, D., & BUYCK, B., 2010 *Russula ochrifloridana* sp.nov., a new yellowish fishy *Russula* from Florida and its comparison with *R.grundii*. *Cryptogamie-Mycologie*: 31(4): 363-372.

- BUYCK, B., CRUAUD, C., COULOUX, A. & HOSTETTER, V. 2011 *Cantharellus texensis* sp. nov. from Texas (USA), a southern twin of *C. cinnabarinus* revealed by tef-1 sequence data. *Mycologia* 103: 1037-1046.
- BUYCK, B. & ADAMČÍK. S., 2011. Type studies of the *Russula* species described by W.A. Murrill, 2. *R. roseiisabellina*, *R. sericella* and *R. obscuriformis. Mycotaxon* 115: 131-144.
- BUYCK, B. & HOFSTETTER, V., 2011 The contribution of tef-1 sequences for species delimitation in the *Cantharellus cibarius* complex in the southeastern USA. *Fungal Diversity* 49(1): 35-46.
- ADAMČÍK, S. BUYCK, B., 2011. The species of *Russula* subsection *Xerampelinae* described by C.H. Peck and Miss G.S. Burlingham. *Cryptogamie, Mycologie* 32(1): 63-81.
- BUYCK, B. & ADAMCIK, S., 2011 Type studies in *Russula* subgenus *Heterophyllidia* from the eastern United States. *Cryptogamie*, *Mycologie* 32(2): 151-169
- BUYCK, B. & ADAMCIK, S., 2011 Type studies in *Russula* subsection *Decolorantinae* from the eastern United States. *Cryptogamie, Mycologie* 32(3): 323-339.
- ADAMČÍK, S. & BUYCK, B., 2011. In and out of *Russula* subsection *Roseinae*. *Nova Hedwigia* 94 (3-4): 413-428.
- WARTCHOW F., BUYCK B. & MAIA, L.C. 2011 *Cantharellus aurantioconspicuus* (Cantharellales), a new species from Pernambuco, Brazil. *Nova Hedwigia* 94(1-2): 129-137.
- BUYCK, B., BESSETTE, A. & ADAMČÍK, S., 2011 *Russula hixsonii* Murrill, a rare and intriguing southern species of uncertain systematic position, rediscovered in Georgia, USA. *Cryptogamie, Mycologie* 32(4): 403-412.
- BUYCK, B. & ADAMČÍK, S. 2012 The *Russula xerampelina* complex (Russulales, Agaricomycotina,) in North America. *Scripta Botanica Belgica* (in print).
- SCHOCH, C.L. et al., 2012. The internal transcribed spacer as a universal DNA barcode marker for Fungi. P. Natl. Acad. Sci. USA vol. 109, no. 16: 6241-6246 (includes our submission of several genes for some North American chanterelles)

CURRICULUM VITAE

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RESEARCH.

2013-2007

Swiss Federal Station of Research Agroscope Changins-Wädenswil (Switzerland).

Permanent position: Responsible for epidemiology and diagnostics of fungal diseases of grapevine and crops.

Collaboration with Bart Buyck (MNHN, Paris, France): Molecular systematics of Cantharellales and Russulales.

2005

Research associate of François Lutzoni, Duke University (NC, U.S.A.) for the project Assembling the Fungal Tree of Life (AFTOL) (http://ocid.nacse.org/research/deephyphae/htmls/)

<u>Research</u>: Molecular systematics of Fungi, of lichenized Ascomycota, more specifically of Lecanoromycetes and endolichenic fungi.

2003

Postdoctoral research: Swiss grant from the 'Fonds National Suisse pour la Recherche (FNS)' and **research associate** at Duke University (NC, U.S.A.) of François Lutzoni and Rytas Vilgalys.

Research:

- Molecular systematics of Lyophylleae and Entolomataceae (collaboration with Timothy J. Baroni, professor at State University of New York (SUNY), Cortland.).
- Lichenized Ascomycota (AFTOL project).

2002

Postdoctoral research at Duke University in Rytas Vilgalys laboratory (FNS grant).

<u>Research:</u> Molecular systematics of Lyophylleae versus ecological transitions in the Agaricales.

PUBLICATIONS (2006-2012)

Hofstetter V., Buyck B., Croll D., Viret O., Couloux A., Gindro K. 2012. What if esca disease of grapevine were not a fungal disease? *Fungal Diversity* **54**, 51-67.

Schoch C.L., Seifert K.A., Huhndorf S., Robert V., Spouge J.L., Levesque C.A., Wen C, Fungal Barcoding Consortium (including V. Hofstetter). 2012. The internal transcribed spacer as a universal DNA barcode marker for Fungi. *P. Natl. Acad. Sci. USA* vol. 109,16:6241-6246, online at www.pnas.org/lookup/suppl/doi:10.1073/pnas.1117018109///DCSupplemental.

- Schmull, M., Miadlikovska, J., Peltzer, M., Stöcker-Wörgötter, E., Hofstetter, V., Fraker, E., Hodkinson, B.P., Reeb, V., Kukva, M., Lumbsch, H.T., Kauff, F., Lutzoni, F. 2011. Phylogenetic affiliations of members of the heterogeneous lichen-forming fungi of the genus Lecidea sensu Zahlbruckner (Lecanoromycetes, Ascomycota). Mycologia 103(5): 983-1003.
- Baroni, T. J., Hofstetter, V., Largent, D. L. and Vilgalys, R. 2011. Entocybe is proposed as a new genus in the Entolomataceae (Agaricomycetes, Basidiomycota) based on morphological and molecular evidence. North American Fungi 6(12):1-19.
- Buyck, B., Hofstetter V., 2011. The contribution of tef-1 sequences to species delimitation in the Cantharellus cibarius complex in the southeastern United States. Fungal Diversity (in press).
- Buyck, B., Cruaud, C., Couloux, A., Hofstetter, V. 2011. Cantharellus texensis sp. nov. from Texas (USA), a southern twin of C. cinnabarinus revealed by tef-1 sequence data. Mycologia (in press).
- Buyck, B., Hofstetter, V., Verbeken A. & Walleyn, R., 2010. Proposal to conserve the name Lactarius (Basidiomycota) with a conserved type and to conserve Lactariopsis (Basidiomycota) against Lactifluus and Galorrheus. Taxon 59(1):1-12.
- Buyck, B., Hofstetter, V., Verbeken A. & W Walleyn R., 2010. Nomenclature, formal reports, proposals and opinion. Proposal to conserve the name Lactarius (Basidiomycota) with a conserved type and to conserve Lactariopsis (Basidiomycota) against Lactifluus and Galorrheus. Mycotaxon 111: 501-520
- Buyck, B., Lewis D., Eyssartier G. & Hofstetter, V., 2010. Cantharellus quercophilus sp.nov. from post oak woodland in Texas with notes on other yellow brown small chanterelles in the southern USA. Cryptogamie-Mycologie 31(1): 17-33.
- Casieri, L., Hofstetter, V., Viret, O., Gindro, K. 2009. Fungal communities associated with the wood of different cultivars of young Vitis vinifera plants. Phytopathologia Mediterranea 48(1): 73-83.
- Arnold, A.E., Miadlikowska, J., Higgins, K.L., Sarvate, S.D., Gugger, P., Way A., Hofstetter, V., Kauff, F., Lutzoni, F. 2009. A phylogenetic estimation of trophic transition networks for ascomycetous fungi: Are lichens cradles of symbiotrophic fungal diversification. Systematic Biology, 58(3):283-297.
- Buyck, B., Hofstetter, V., Verbeken, A. and Walleyn, R., 2009. Proposal to conserve the name Lactarius (Basidiomycota) and its homotypic synonyms with a conserved type. Taxon 58(2).
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